## 1176-13-184 Matthew Mastroeni\* (mmastro@iastate.edu) and Jason McCullough. Chow rings of matroids are Koszul.

The Chow ring of a matroid is a commutative, graded, Artinian, Gorenstein algebra with linear and quadratic relations defined by the matroid. These rings have garnered significant attention in recent years thanks to their role in establishing long-standing conjectures on the combinatorics of matroids, namely the resolution of the Heron-Rota-Welsh Conjecture by Adiprasito, Huh, and Katz and the resolution of the Top-Heavy Conjecture by Braden, Huh, Matherne, Proudfoot, and Wang. More recently, it was also conjectured by Dotsenko that the Chow ring of any matroid is always Koszul. We give an affirmative answer to Dotsenko's conjecture. (Received January 22, 2022)